

## CLAIMS

1. Method for enabling rooting or grafting of a plant which contains in its genome a gene which is placed under the regulation of an inducible promoter and which codes for a rooting-inhibiting product or a product leading to rooting inhibition, comprising of treating the plant prior to production of a cutting or graft or treating the cutting or graft after production of the cutting or graft with a substance which:
- a) discontinues the effect of the rooting-inhibiting gene; and/or
  - b) results in expression of a second gene likewise present in the plant which is under the regulation of an inducible promoter and the expression product of which discontinues the effect of the rooting-inhibiting gene.
2. Method as claimed in claim 1, **characterized in that** the substance which discontinues the effect of the rooting-inhibiting gene is chosen from the group consisting of substances which inhibit the biosynthesis of the rooting-inhibiting product and structural analogs of the rooting-inhibiting product.
3. Method as claimed in claim 2, **characterized in that** the rooting-inhibiting product is a cytokinin.
4. Method as claimed in claim 3, **characterized in that** the substance which inhibits the biosynthesis of the cytokinin is chosen from the group consisting of substances from Table 1A.
5. Method as claimed in claim 3, **characterized in that** the structural analog of cytokinin is chosen from the group consisting of substances from Table 1B.
6. Method as claimed in claim 1, **characterized in that** the second gene is a gene coding for the antisense version of the rooting-inhibiting gene.

7. Method as claimed in claim 6, **characterized in that** the second gene codes for an antisense version of the ipt gene.

8. Method as claimed in claim 1, **characterized in that** the second gene is a gene which codes for a second sense version of the rooting-inhibiting gene.

9. Method as claimed in claim 8, **characterized in that** the second gene codes for a sense version of the ipt gene.

10. Method as claimed in claim 1, **characterized in that** the second gene is one or more of the rolABC genes of Agrobacterium rhizogenes.

11. Method as claimed in claim 1, **characterized in that** the second gene codes for a repressor of the promoter of the rooting-inhibiting gene.

12. Method as claimed in claim 11, **characterized in that** the rooting-inhibiting gene is the ipt gene and is under the regulation of a modified wound-inducible promoter, wherein the modification is such that the repressor of the GAL4 regulation system can interact therewith.

13. Method as claimed in claim 1, **characterized in that** the second gene codes for a degradation enzyme of the rooting-inhibiting gene product.

14. Method as claimed in claim 13, **characterized in that** the rooting-inhibiting gene product is cytokinin and the second gene codes for cytokinin-oxidase.

15. Method as claimed in claim 1, **characterized in that** the second gene codes for a mutated receptor for the rooting-inhibiting gene product in order to block the signal transduction pathway of the rooting-inhibiting gene product.

16. Method as claimed in claim 15, **characterized in that** the rooting-inhibiting gene product is cytokinin and the second gene codes for a mutated cytokinin receptor.

17. Transgenic plant which is reversibly protected against undesired vegetative propagation, which plant contains in its genome a first gene which is placed under the regulation of an inducible first promoter and  
5 which codes for a rooting-inhibiting product or a product leading to rooting inhibition, and a second gene which is placed under the regulation of a second promoter inducible by means of another stimulus and which codes for a product which deactivates the rooting-  
10 inhibiting expression product of the first gene.

18. Transgenic plant as claimed in claim 17, **characterized in that** the second gene is a gene which codes for the antisense version of the rooting-inhibiting gene.

15 19. Transgenic plant as claimed in claim 18, **characterized in that** the second gene codes for an antisense version of the ipt gene.

20. Transgenic plant as claimed in claim 17, **characterized in that** the second gene is a gene which  
20 codes for a second sense version of the rooting-inhibiting gene.

21. Transgenic plant as claimed in claim 20, **characterized in that** the second gene codes for a sense version of the ipt gene.

, 25 22. Transgenic plant as claimed in claim 17, **characterized in that** the second gene is one or more of the rolABC genes of Agrobacterium rhizogenes.

23. Transgenic plant as claimed in claim 17, **characterized in that** the second gene codes for a  
30 repressor of the promoter of the rooting-inhibiting gene.

24. Transgenic plant as claimed in claim 23, **characterized in that** the rooting-inhibiting gene is the ipt gene and is under the regulation of a modified  
35 wound-inducible promoter, wherein the modification is such that the repressor of the GAL4 regulation system can interact therewith.

25. Transgenic plant as claimed in claim 17, **characterized in that** the second gene codes for a degradation enzyme of the rooting-inhibiting gene product.

5        26. Transgenic plant as claimed in claim 25, **characterized in that** the rooting-inhibiting gene product is cytokinin and the second gene codes for cytokinin-oxidase.

10       27. Transgenic plant as claimed in claim 17, **characterized in that** the second gene codes for a mutated receptor for the rooting-inhibiting gene product in order to block the signal transduction pathway of the rooting-inhibiting gene product.

15       28. Transgenic plant as claimed in claim 27, **characterized in that** the rooting-inhibiting gene product is cytokinin and the second gene codes for a mutated cytokinin receptor.

20       29. Method for reversing rooting inhibition in a cutting or graft of a transgenic plant as claimed in claims 17-28, comprising of treating the cutting or graft with the stimulus of the second promoter and placing the cutting or graft on a rooting medium.

25       30. DNA construct comprising transcription-initiation sequences, including an inducible promoter, and optionally transcription termination sequences operably linked to a second gene as defined in the characterizing part of claims 6-16.

30       31. DNA construct as claimed in claim 30, further comprising a first gene which codes for a rooting-inhibiting product or a product leading to rooting inhibition provided with transcription-initiation sequences operably linked thereto, including an inducible promoter, and optionally transcription termination sequences.

35       32. DNA construct as claimed in claim 31, **characterized in that** the first gene is the ipt gene.

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